CTEIP Visionary Projects
TENA/CDAPS/VTTR/JRRC
(Projects Depending on HLA)

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Keys to the Future

Vision

Policy

User Input

Field Input

Process

Initiatives
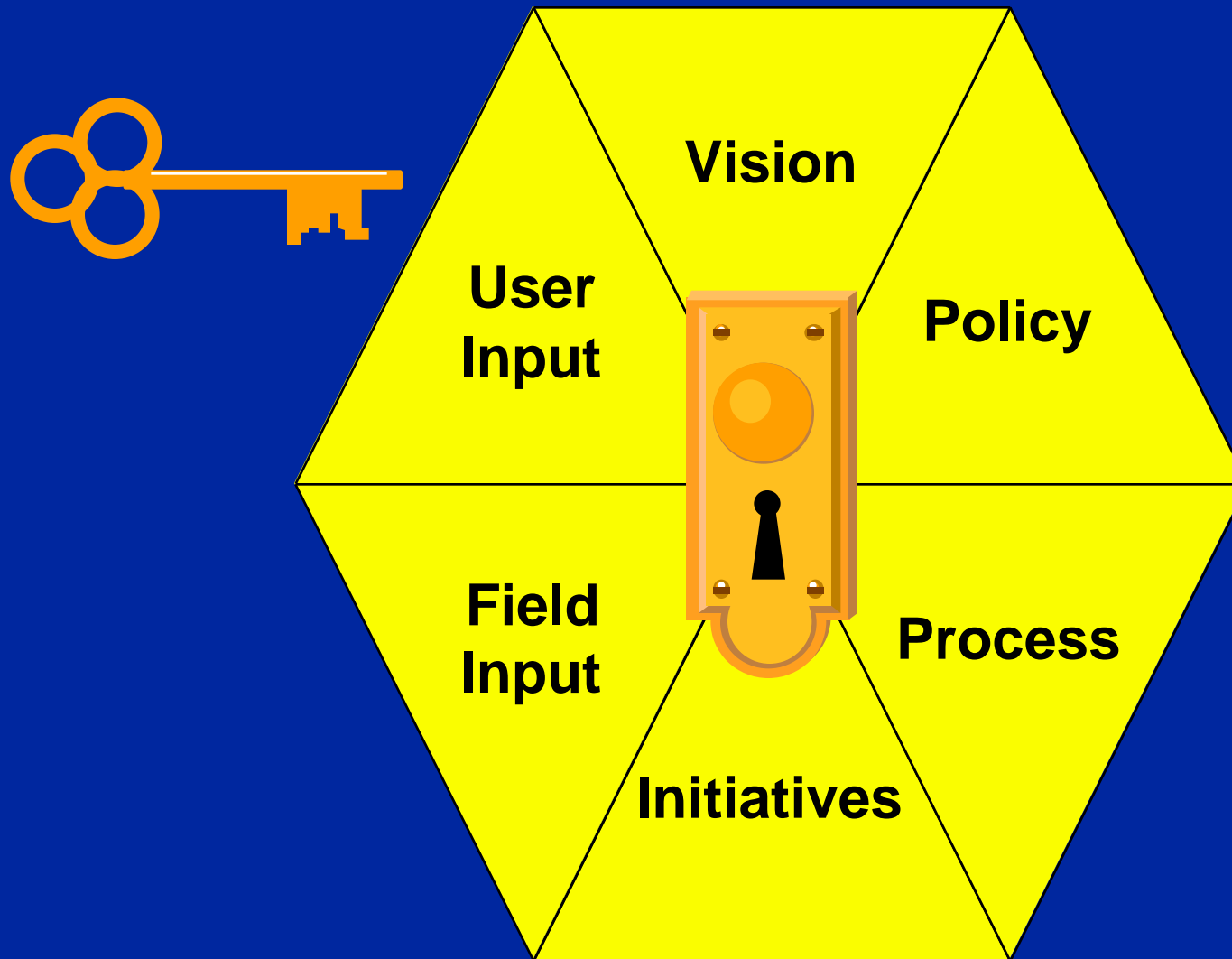
Potential Common Capabilities

- Airborne Instrumentation
- On-Board Missile Instrumentation
- Drone Control Systems
- Telemetry Systems
- Range Data Links
- Stimulators in Facilities
- Tools for Integrating Simulations & Live Systems
- Tools for Connecting Multiple Facilities & Ranges
- Data Processing and Display Software Modules
- Architecture
-
-
- (and many more)

Commonality Projects

- **Airborne Instrumentation** `CAIS`
- **On-Board Missile Instrumentation** `JAMI`
- **Drone Control Systems** `NGTCS`
- **Telemetry Systems** `ARTM`
- **Range Data Links** `FIRST`
- **Stimulators in Facilities** `JISTF`
- **Tools for Integrating Simulations & Live Systems** `VTTR`
- **Tools for Connecting Multiple Facilities & Ranges** `JRRC`
- **Data Processing and Display Software Modules** `CDAPS`
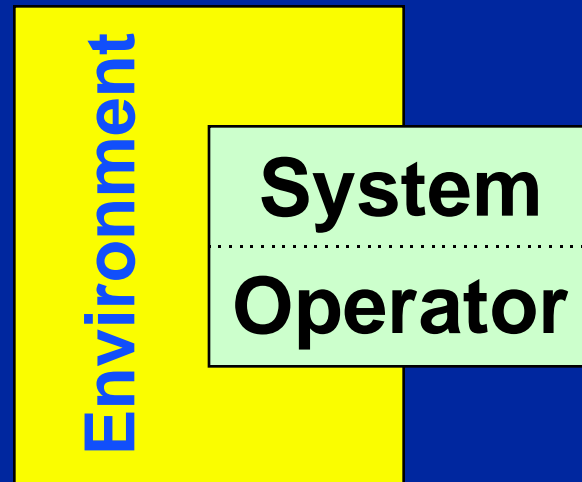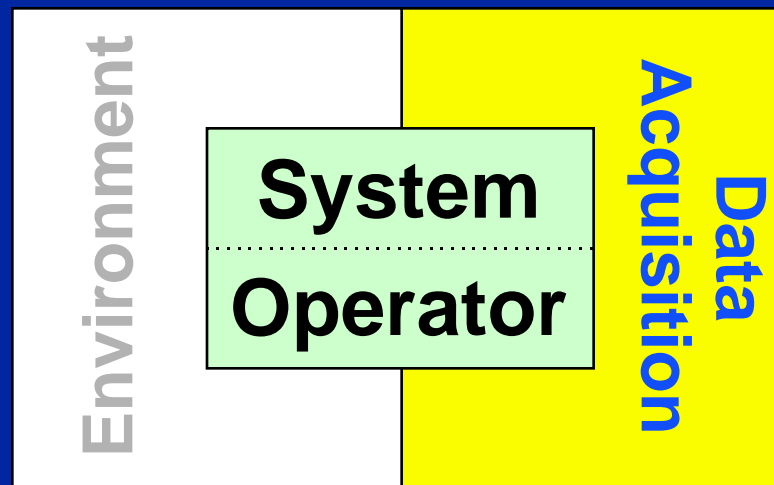- **Architecture** `TENA`

Users

Testing
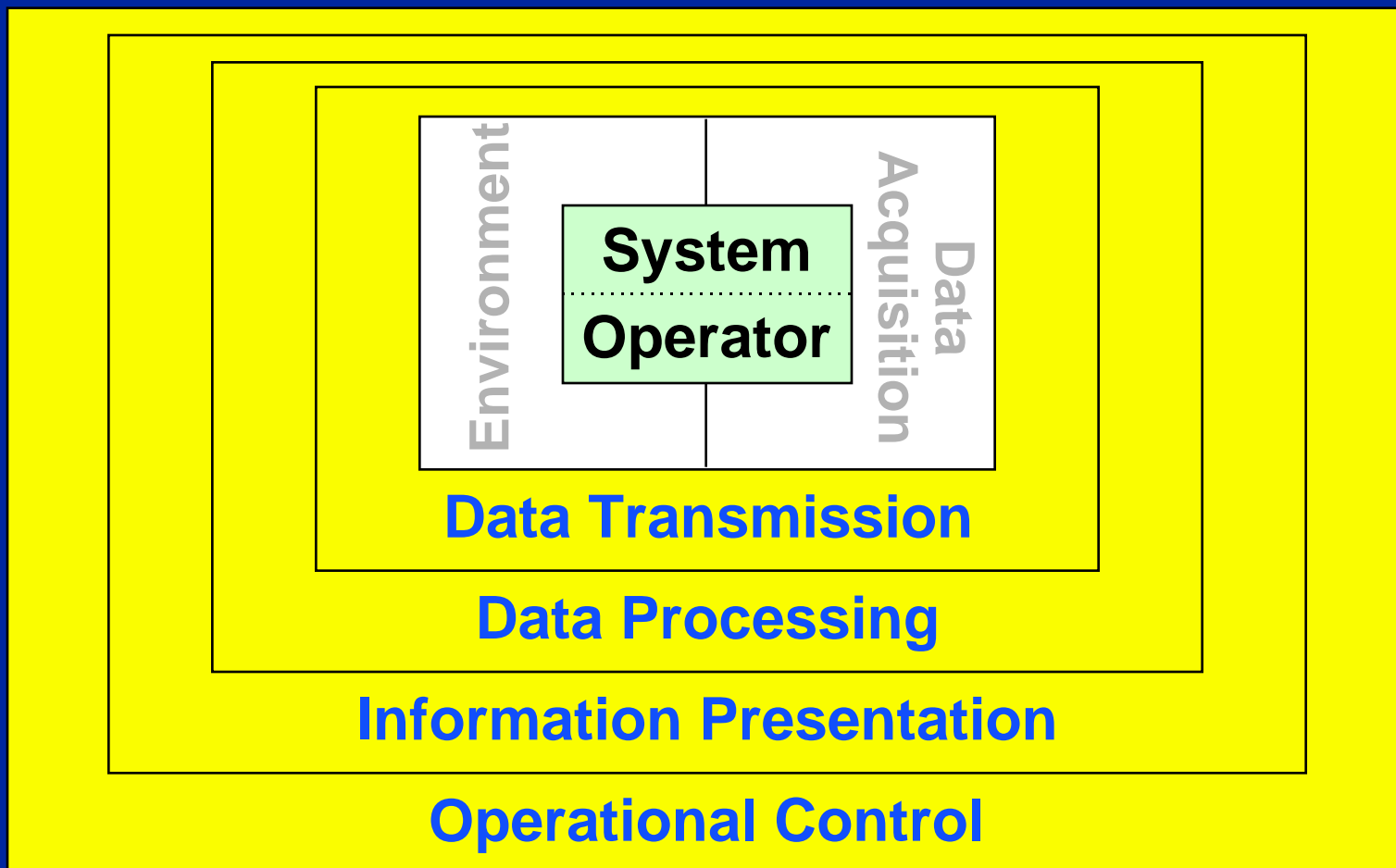
System Performance

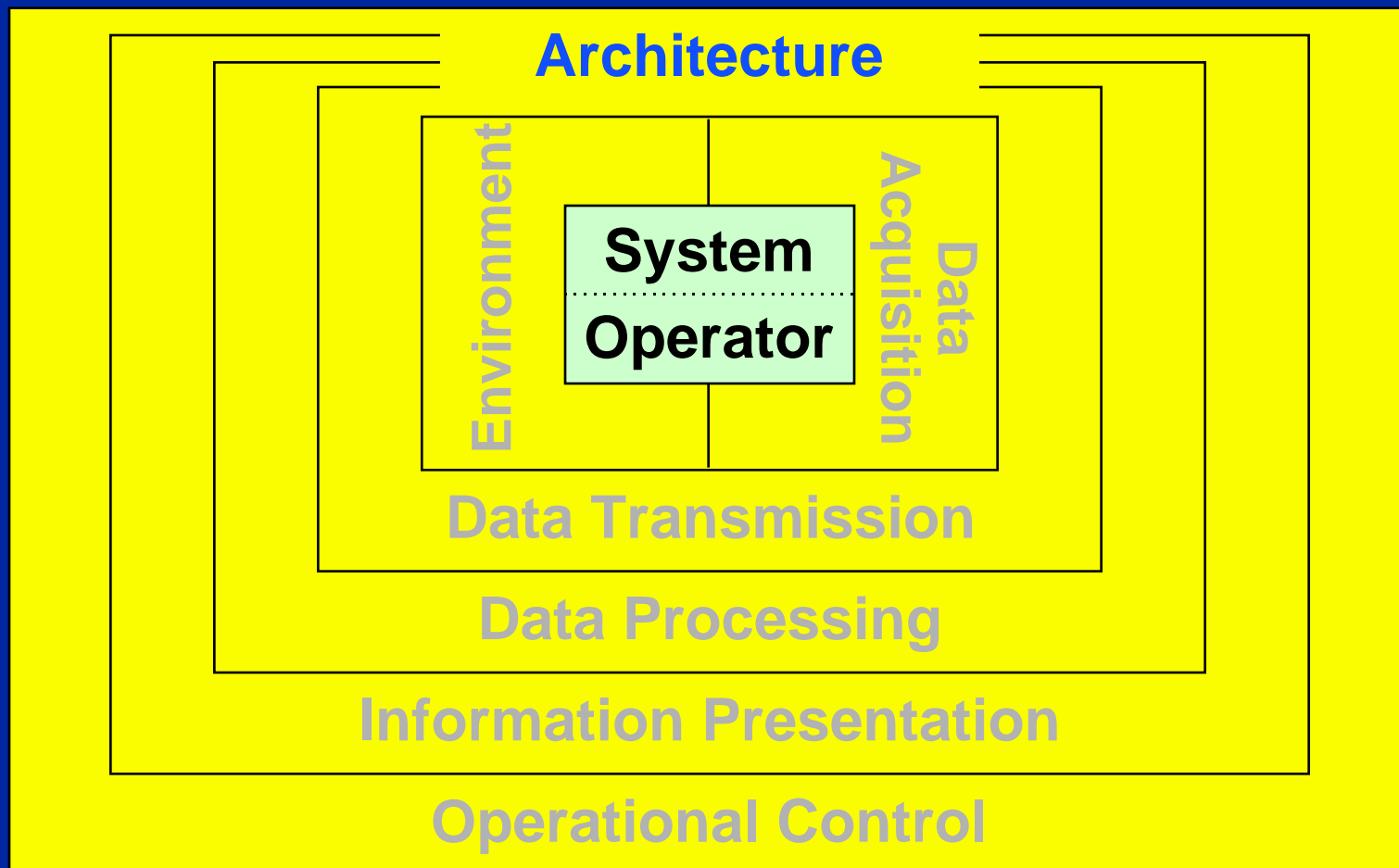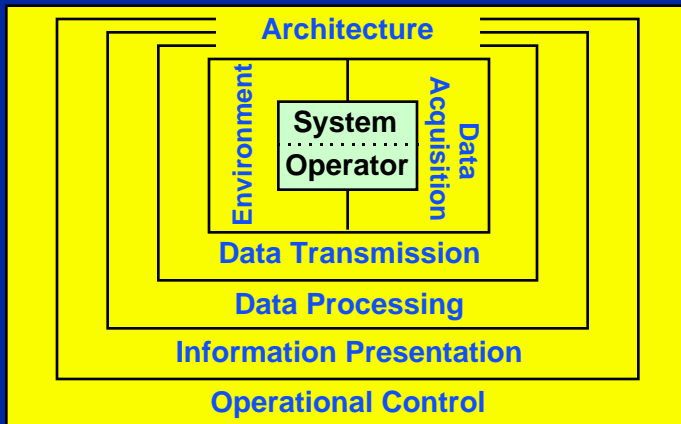**Operator Proficiency**

Training

A Realistic Environment

Environment

System

Operator

Data Acquisition

Outer Shells for Presentation and Control

Environment

Data Acquisition

System

Operator

Data Transmission

Data Processing

Information Presentation

Operational Control

Architecture

Architecture

Environment

Data Acquisition

System
....
Operator

Data Transmission

Data Processing

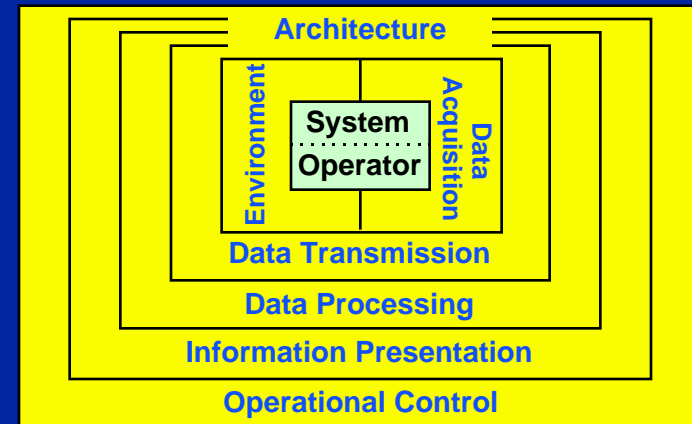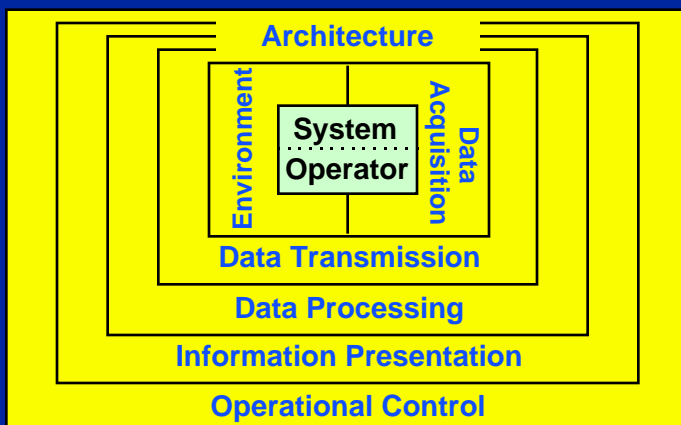**Information Presentation**

Operational Control

Same Functions, Different Worlds
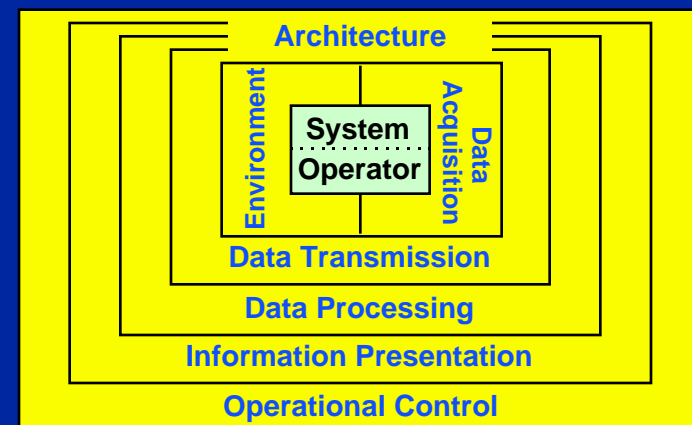

Simulations

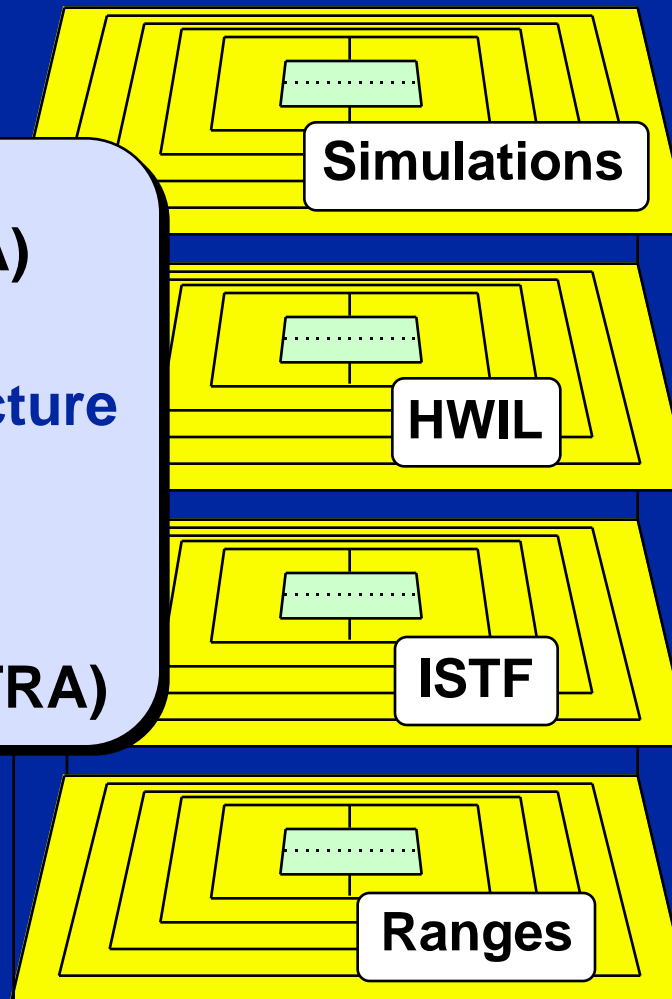
Testing / Training Ranges

Hardware-in-the-Loop

Installed Systems Test Facility

A Common Architecture

- **High Level Architecture (HLA)**
- **Test & Training Enabling Architecture (TENA)**
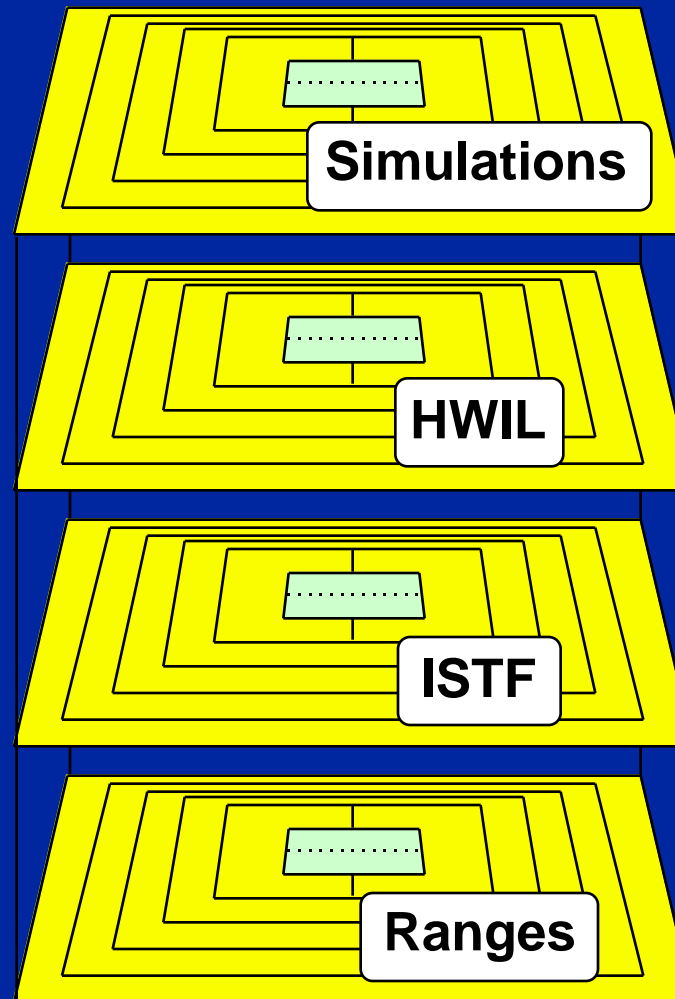- **Common Test & Training Range Architecture (CTTRA)**

Simulations

JMASS

JSIMS

HWIL

STAF

ISTF

ACETEF

Ranges

MRTFBs

Training

Common Control Tools

- **Virtual Test and Training Range (VTTR)**

Simulations

HWIL

ISTF

Ranges

JMASS

JSIMS

STAF

ACETEF

MRTFBs

Training

Common Productivity Enhancement Tools

- **Joint Regional Range Complex (JRRC)**

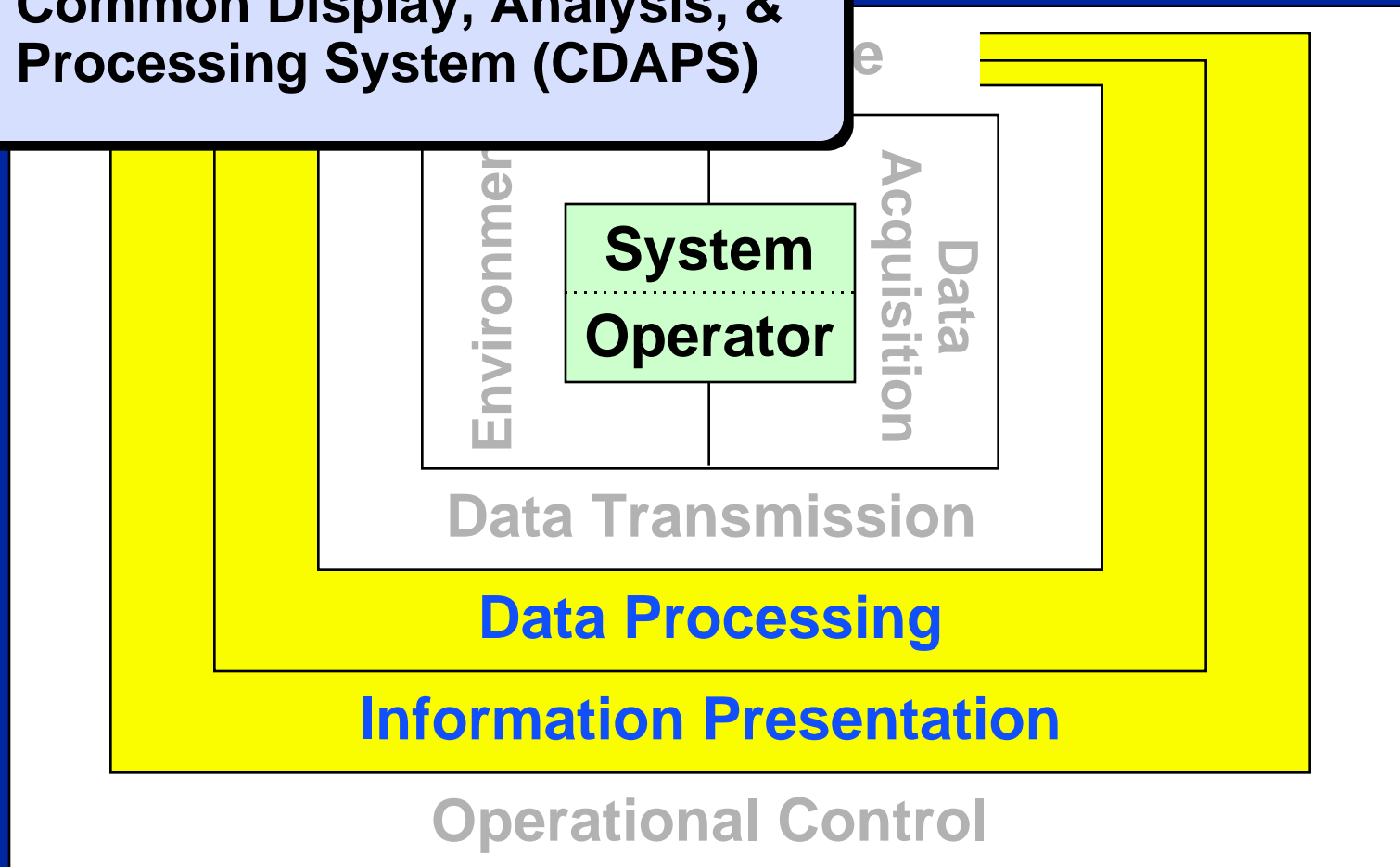Simulations — JMASS, JSIMS

HWIL — STAF

ISTF — ACETEF

Ranges — MRTFBs, Training

Common Software Modules

Common Display, Analysis, & Processing System (CDAPS)

Environment

System
....
Operator

Data Acquisition

Data Transmission

Data Processing

Information Presentation

Operational Control

Summary Descriptions of the Programs

- **TENA: Provide a common architecture**

- **CDAPS: Provide common software modules for data processing, analysis & display**

- **VTTR: Provide common resources to facilitate integration of simulations and live systems**

- **JRRC: Provide common tools to facilitate interlinking different ranges & facilities**